



MODEL G0538

OSCILLATING SPINDLE SANDER

OWNER'S MANUAL



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OR FORM WITHOUT THE WRITTEN APPROVAL OF GRIZZLY INDUSTRIAL, INC.**
(FOR MODELS MANUFACTURED SINCE 12/09) #JK7731 PRINTED IN CHINA



WARNING!

This manual provides critical safety instructions on the proper setup, operation, maintenance and service of this machine/equipment.

Failure to read, understand and follow the instructions given in this manual may result in serious personal injury, including amputation, electrocution or death.

The owner of this machine/equipment is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, blade/cutter integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.



WARNING!

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement and other masonry products.**
- **Arsenic and chromium from chemically-treated lumber.**

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

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INTRODUCTION

Foreword

We are proud to offer the Model G0538 Oscillating Spindle Sander. This machine is part of a growing Grizzly family of fine woodworking machinery. When used according to the guidelines set forth in this manual, you can expect years of trouble-free, enjoyable operation and proof of Grizzly's commitment to customer satisfaction.

We are pleased to provide this manual with the Model G0538. It was written to guide you through assembly, review safety considerations, and cover general operating procedures. It represents our effort to produce the best documentation possible.

The specifications, drawings, and photographs illustrated in this manual represent the Model G0538 as supplied when the manual was prepared. However, owing to Grizzly's policy of continuous improvement, changes may be made at any time with no obligation on the part of Grizzly. For your convenience, we always keep current Grizzly manuals available on our website at **www.grizzly.com**. Any updates to your machine will be reflected in these manuals as soon as they are complete. Visit our site often to check for the latest updates to this manual!

Contact Info

If you have any comments regarding this manual, please write to us at the address below:

Grizzly Industrial, Inc.
% Technical Documentation Manager
P.O. Box 2069
Bellingham, WA 98227-2069

We stand behind our machines. If you have any service questions or parts requests, please call or write us at the location listed below.

Grizzly Industrial, Inc.
1203 Lycoming Mall Circle
Muncy, PA 17756
Phone: (570) 546-9663
Fax: (800) 438-5901
E-Mail: techsupport@grizzly.com
Web Site: <http://www.grizzly.com>





MACHINE DATA SHEET

Customer Service #: (570) 546-9663 · To Order Call: (800) 523-4777 · Fax #: (800) 438-5901

MODEL G0538 1/3 HP OSCILLATING SPINDLE SANDER

Product Dimensions:

Weight..... 34 lbs.
Length/Width/Height..... 20 x 14 x 11-1/2 in.
Foot Print (Length/Width)..... 20 x 14 in.

Shipping Dimensions:

Type..... Cardboard
Content..... Machine
Weight..... 37 lbs.
Length/Width/Height..... 22 x 16 x 18 in.

Electrical:

Power Requirement..... 110V, Single-Phase, 60 Hz
Switch..... Paddle with Locking Tab
Switch Voltage..... 110V
Cord Length..... 9 ft.
Cord Gauge..... 18 gauge
Minimum Circuit Size..... 10 amp
Plug Included..... Yes
Included Plug/Outlet Type..... 5-15

Motors:

Main

Type..... Universal
Horsepower..... 1/3 HP
Voltage..... 110V
Prewired..... 110V
Phase..... Single
Amps..... 2.4A
Speed..... 1725 RPM
Cycle..... 60 Hz
Number Of Speeds..... 1
Power Transfer..... Direct
Bearings..... Sealed and Permanently Lubricated

Main Specifications:

Table Info

Table Width..... 14 in.
Table Length..... 20 in.
Table Thickness..... 1 in.
Table Opening..... 3-1/2 in.
Table Inserts..... 11/16, 15/16, 1-3/16, 1-21/32, 2-3/16, 3-3/16 in.



Spindle Info

Spindle Diameters..... 1/2, 3/4, 1, 1-1/2, 2, 3 in.
Spindle Lengths..... 4-1/2 in.
Spindle Speed..... 1725 RPM
Spindle Oscillations..... 72 SPM
Stroke Length..... 5/8 in.
Arbor Size..... 1/2 in.
Total Arbor Length..... 4-1/2 in.

Construction

Base Construction..... Plastic
Table Construction..... Particle Board with Plastic Laminate
Frame Construction..... Plastic
Paint..... Powder Coated

Other

No. Of Dust Ports..... 1
Dust Port Size..... 2-1/2 in.

Other Specifications:

Country Of Origin China
Warranty 1 Year
Serial Number Location On Front
Assembly Time 20 minutes

Features:

Paddle On/Off Switch with Lock
Six 4-1/2 in. Tall Sanding Drums
Compact Size for Easy Storage
Three 80 gr. Sleeves (1/2", 1" and 2")
Three 150 gr. Sleeves (3/4", 1-1/2" and 3")
Six Table Inserts



Identification

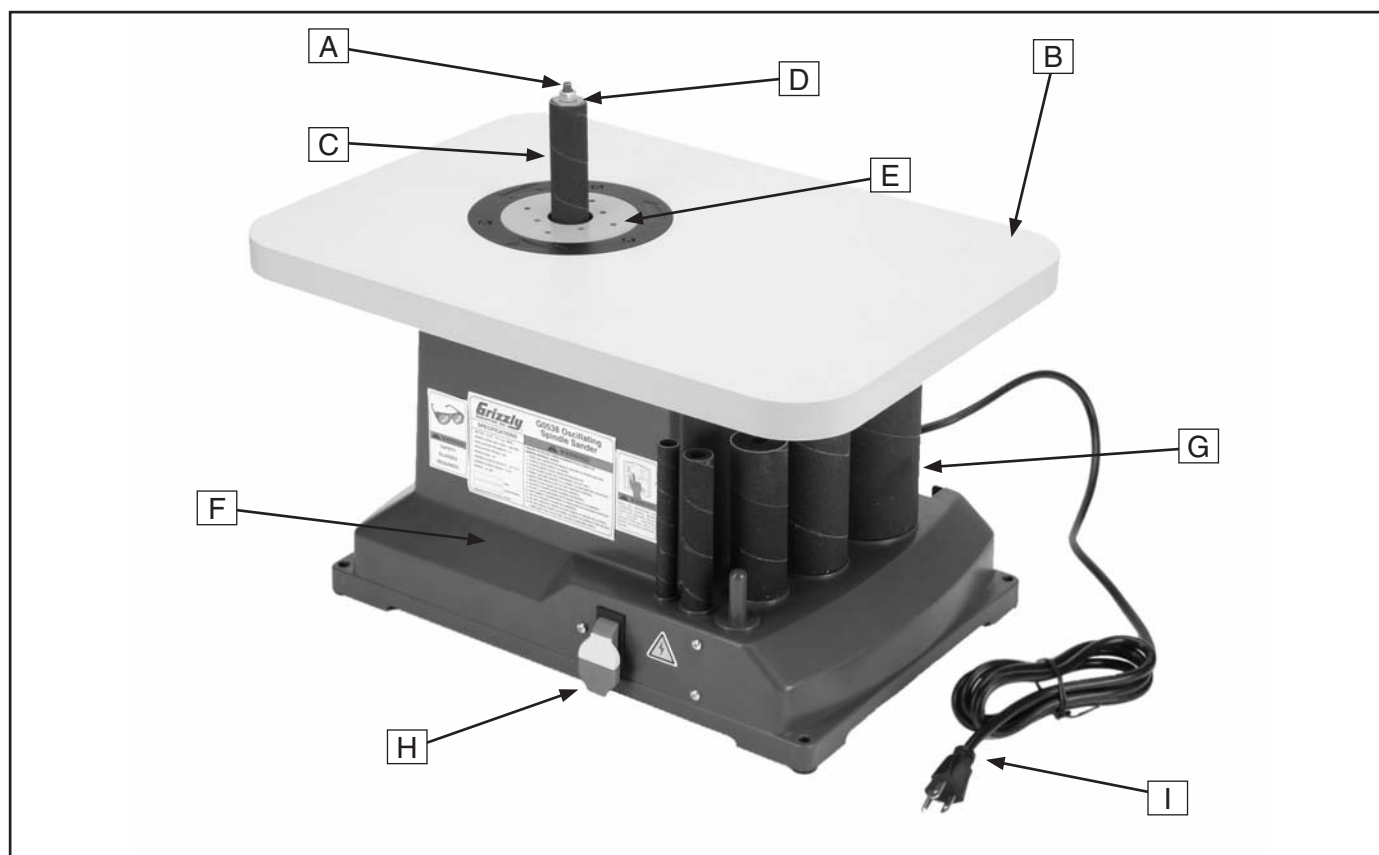


Figure 1. Identification.

- A. Spindle
- B. Table
- C. Sanding Sleeve
- D. Spindle Washer
- E. Throat Plate
- F. Sander Body
- G. Accessory Storage Area
- H. ON/OFF Paddle Switch with Lockout Key
- I. 5-15 Plug and Power Cable
- J. 2½" Dust Port (not shown)



SECTION 1: SAFETY

WARNING

For Your Own Safety, Read Instruction Manual Before Operating this Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words which are intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures.



Indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTICE

This symbol is used to alert the user to useful information about proper operation of the machine.

WARNING

Safety Instructions for Machinery

- 1. READ THROUGH THE ENTIRE MANUAL BEFORE STARTING MACHINERY.** Machinery presents serious injury hazards to untrained users.
- 2. ALWAYS USE ANSI APPROVED SAFETY GLASSES WHEN OPERATING MACHINERY.** Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
- 3. ALWAYS WEAR AN ANSI APPROVED RESPIRATOR WHEN OPERATING MACHINERY THAT PRODUCES DUST.** Wood dust is a carcinogen and can cause cancer and severe respiratory illnesses.
- 4. ALWAYS USE HEARING PROTECTION WHEN OPERATING MACHINERY.** Machinery noise can cause permanent hearing damage.
- 5. WEAR PROPER APPAREL. DO NOT** wear loose clothing, gloves, neckties, rings, or jewelry which may get caught in moving parts. Wear protective hair covering to contain long hair and wear non-slip footwear.
- 6. NEVER OPERATE MACHINERY WHEN TIRED, OR UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.** Be mentally alert at all times when running machinery.



WARNING

Safety Instructions for Machinery

7. **ONLY ALLOW TRAINED AND PROPERLY SUPERVISED PERSONNEL TO OPERATE MACHINERY.** Make sure operation instructions are safe and clearly understood.
8. **KEEP CHILDREN AND VISITORS AWAY.** Keep all children and visitors a safe distance from the work area.
9. **MAKE WORKSHOP CHILD PROOF.** Use padlocks, master switches, and remove start switch keys.
10. **NEVER LEAVE WHEN MACHINE IS RUNNING.** Turn power **OFF** and allow all moving parts to come to a complete stop before leaving machine unattended.
11. **DO NOT USE IN DANGEROUS ENVIRONMENTS.** DO NOT use machinery in damp, wet locations, or where any flammable or noxious fumes may exist.
12. **KEEP WORK AREA CLEAN AND WELL LIT.** Clutter and dark shadows may cause accidents.
13. **USE A GROUNDED EXTENSION CORD RATED FOR THE MACHINE AMPERAGE.** Undersized cords overheat and lose power. Replace extension cords if they become damaged. DO NOT use extension cords for 220V machinery.
14. **ALWAYS DISCONNECT FROM POWER SOURCE BEFORE SERVICING MACHINERY.** Make sure switch is in OFF position before reconnecting.
15. **MAINTAIN MACHINERY WITH CARE.** Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
16. **MAKE SURE GUARDS ARE IN PLACE AND WORK CORRECTLY BEFORE USING MACHINERY.**
17. **REMOVE ADJUSTING KEYS AND WRENCHES.** Make a habit of checking for keys and adjusting wrenches before turning machinery **ON**.
18. **CHECK FOR DAMAGED PARTS BEFORE USING MACHINERY.** Check for binding and alignment of parts, broken parts, part mounting, loose bolts, and any other conditions that may affect machine operation. Repair or replace damaged parts.
19. **USE RECOMMENDED ACCESSORIES.** Refer to the instruction manual for recommended accessories. The use of improper accessories may cause risk of injury.
20. **DO NOT FORCE MACHINERY.** Work at the speed for which the machine or accessory was designed.
21. **SECURE WORKPIECE.** Use clamps or a vise to hold the workpiece when practical. A secured workpiece protects your hands and frees both hands to operate the machine.
22. **DO NOT OVERREACH.** Keep proper footing and balance at all times.
23. **MANY MACHINES WILL EJECT THE WORKPIECE TOWARD THE OPERATOR.** Know and avoid conditions that cause the workpiece to "kickback."
24. **ALWAYS LOCK MOBILE BASES (IF USED) BEFORE OPERATING MACHINERY.**
25. **BE AWARE THAT CERTAIN WOODS MAY CAUSE AN ALLERGIC REACTION** in people and animals, especially when exposed to fine dust. Make sure you know what type of wood dust you will be exposed to and always wear an approved respirator.



WARNING

Safety Instructions for Spindle Sanders

1. **FEED RATE.** Never jam a workpiece against the sanding surface. Firmly hold the workpiece and ease it against the spindle using light pressure.
2. **AVOIDING ENTANGLEMENT.** Keep loose clothing articles such as sleeves, belts or jewelry items away from the spindle. Never wear gloves when operating the spindle sander.
3. **HAND PLACEMENT.** Do not place hands near, or in contact with, sanding surfaces during operation.
4. **WORKPIECE HANDLING.** Hold the workpiece with both hands, or use the appropriate jig or miter gauge.
5. **MAINTENANCE.** Perform machine inspections and maintenance promptly as required.
6. **UNATTENDED MACHINE.** Never leave the machine running unattended.
7. **SANDING SLEEVES.** Worn or damaged sanding sleeves can tear apart and become entangled in the spindle. Replace sanding sleeves promptly as required.
8. **FOREIGN MATERIAL.** Always inspect stock for nails, staples, knots, and other imperfections that could be dislodged and thrown from the machine during sanding operations.
9. **DUST COLLECTION.** Never operate the sander without an adequate dust collection system in place and running.
10. **DIRECTION.** Never sand tapered or pointed stock with the point facing the feed direction.
11. **POWER DISCONNECT.** Disconnect the machine from the power source before changing the sanding sleeve.
12. **RESPIRATOR USE.** Always use a respirator that is approved for wood dust when using this machine. A dust collector is not an adequate substitute.

WARNING

Like all machines there is danger associated with the Model G0538. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to lessen the possibility of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

CAUTION

No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment, or poor work results.



SECTION 2: CIRCUIT REQUIREMENTS

110V Operation

!WARNING

Serious personal injury could occur if you connect the machine to the power source before you have completed the set up process. **DO NOT** connect the machine to the power source until instructed to do so.

Amperage Draw

The Model G0538 motor draws the following amps under maximum load:

Motor Draw 2.4 Amps

Power Supply Circuit Requirements

The power supply circuit for your machine **MUST** be grounded and rated for the amperage given below. Never replace a circuit breaker on an existing circuit with one of higher amperage without consulting a qualified electrician to ensure compliance with wiring codes. **If you are unsure about the wiring codes in your area or you plan to connect your machine to a shared circuit, consult a qualified electrician.**

Circuit Breaker..... 10 Amps

Plug/Receptacle Type

Included Plug Type..... NEMA 5-15

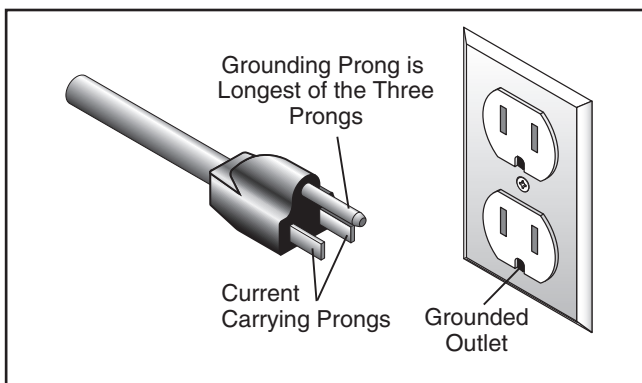
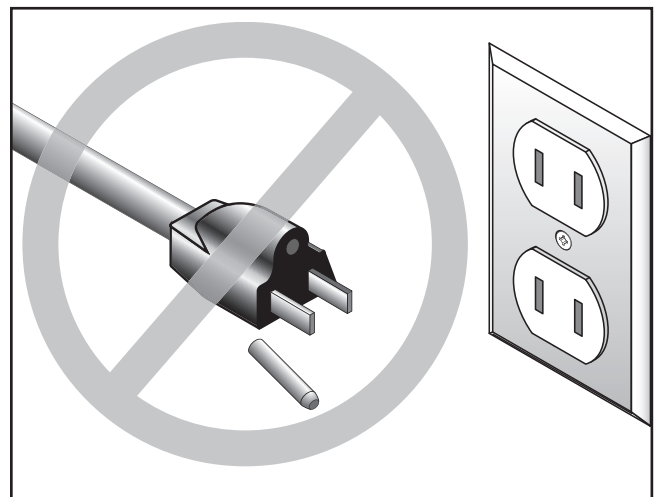
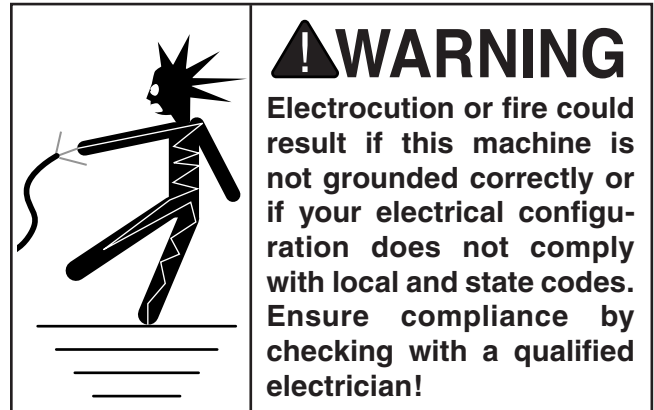


Figure 2. Typical type 5-15 plug and receptacle.



!CAUTION

This machine must have a ground prong in the plug to help ensure that it is grounded. **DO NOT** remove ground prong from plug to fit into a two-pronged outlet! If the plug will not fit the outlet, have the proper outlet installed by a qualified electrician.

Extension Cords

We do not recommend the use of extension cords, if you find it absolutely necessary:

- Use at least a 16 gauge cord that does not exceed 25 feet in length!
- The extension cord must also contain a ground wire and plug pin.
- A qualified electrician **MUST** size cords over 50 feet long to prevent motor damage.



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Inventory

After all the parts have been removed from the box, you should have the following items:

Inventory (Figure 3)	Qty
A. Sander Unit	1
B. Sander Unit Base Plate	1
C. Sanding Sleeve and Drum 3"	1
D. Sanding Sleeve and Drum 2"	1
E. Sanding Sleeve and Drum 1½"	1
F. Sanding Sleeve and Drum ¾"	1
G. Sanding Sleeve ½"	1

Pre-Installed Components (Figure 4)

H. Spindle Washer 7/8"	1
I. Sanding Sleeve and Drum 1"	1
J. Throat Plate 1"	1

Hardware Bag 1

• Wrench 9/16"	2
• Spindle Washer 1 13/16"	1
• Spindle Washer 5/8"	1
• Tap Screw M4-0.7 x 12	4

Hardware Bag 2

• Throat Plate ½"	1
• Throat Plate ¾"	1
• Throat Plate 1½"	1
• Throat Plate 2"	1
• Throat Plate 3"	1

In the event that any nonproprietary parts are missing (e.g. a nut or a washer), we would be glad to replace them, or for the sake of expediency, replacements can be obtained at your local hardware store.

NOTICE

If you have never used this type of machine or equipment before, WE STRONGLY RECOMMEND that you read books, trade magazines, or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

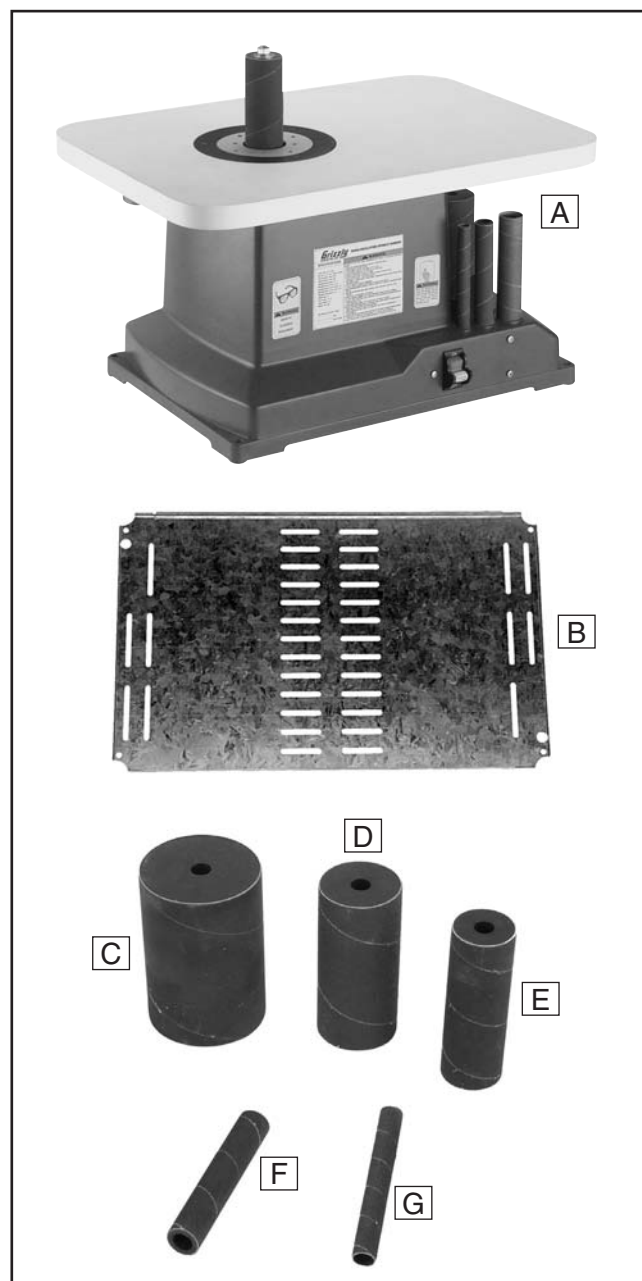


Figure 3. Inventory.

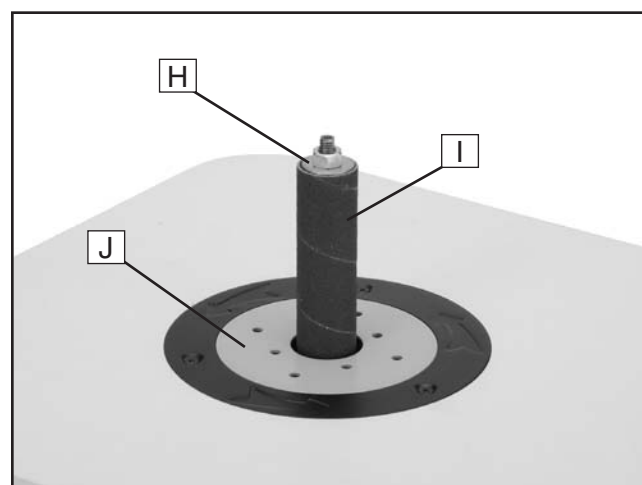


Figure 4. Pre-Installed Components.



Base Attachment

The metal base plate needs to be attached to the spindle sander before use.

Components and Hardware Needed:	Qty
Tap Screw M4-0.7 x 12	4
Sander Base Plate	1

To attach the sander base plate:

1. Examine the inside of the sander body and remove any loose packing material found.

Note: *Loose packing material inside the sander body during operation is an imminent fire hazard.*

2. Attach the base plate to the underside of the sander with the included M4-0.7 x 12 tap screws.

Mounting

We strongly recommend mounting the spindle sander to a mounting board or workbench before being used.

Components and Hardware Needed:	Qty
Hex Bolts 1/4"-20 (length varies).....	4
Hex Nuts 1/4"-20	4
Flat Washers 1/4"	8
Lock Washers 1/4"	4

To secure the spindle sander to a benchtop or mounting board:

1. Place the spindle sander on a workbench or mounting board no smaller than 24"W x 18"D.
2. Using the 1/4" holes in the sander body as a template, drill holes through the mounting board or benchtop as appropriate.
3. Secure the spindle sander to the benchtop or mounting board with 1/4" hex bolts, washers, lock washers, and hex nuts as shown in **Figure 5**.

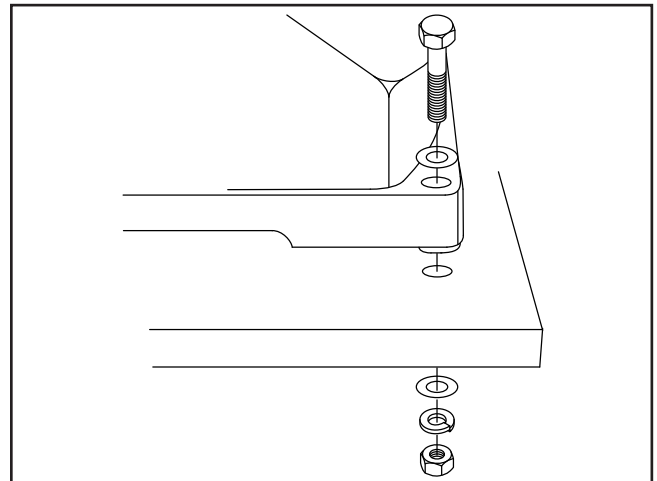


Figure 5. Mounting the spindle sander.

Dust Collection

To connect a dust collection hose:

1. Fit the 2½" dust hose over the dust port shown in **Figure 6**, and secure in place with a hose clamp.
2. Tug the hose to ensure it does not come off.



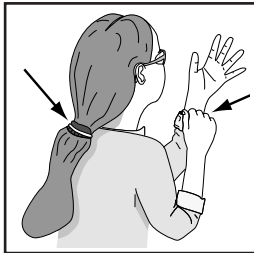
Figure 6. Dust port.

⚠ CAUTION

DO NOT operate the Model G0538 without an adequate dust collection system. This saw creates substantial amounts of wood dust while operating. Failure to use a dust collection system can result in respiratory illness.

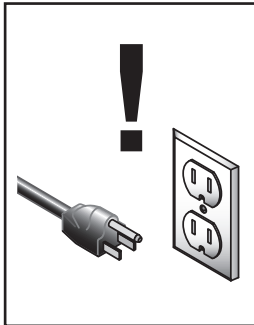


SECTION 4: OPERATIONS



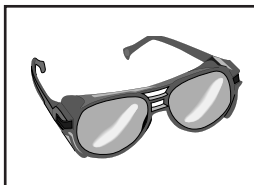
!WARNING

Keep loose clothing rolled up and out of the way of machinery and keep hair pulled back.



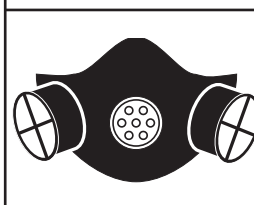
!WARNING

Disconnect power from the machine when performing any maintenance, assembly or adjustments. Failure to do this may result in serious personal injury.



!WARNING

Using this machine produces dust which may cause allergic reactions and respiratory problems. Protect yourself by wearing safety glasses and a respirator during the entire operation process. **DO NOT** wear gloves while operating this machine as they can be caught in the rotating surfaces and become entangled. Failure to comply with this warning may result in serious personal injury.



Switch/Safety Key

To disable the switch, remove the lockout key (Figure 7) from the paddle switch.

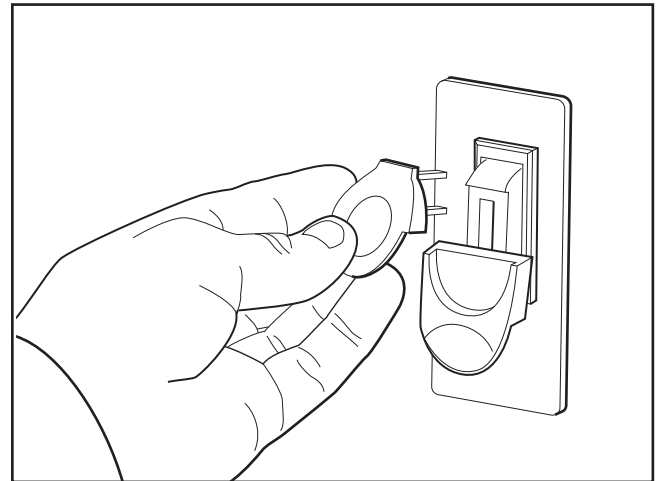


Figure 7. Removing key to disable switch.

Sleeve Installation

The G0538 Oscillating Spindle Sander comes with six different-sized sanding drums and sleeves. Always refer to the table below when determining the appropriate throat plate, sanding drum, and spindle washer size for a particular sleeve.

Sanding Sleeve Diameter	Sanding Drum Diameter	Throat Plate Inside Diameter	Spindle Washer Size
1/2"	N/A	1 1/16"	5/8"
3/4"	3/4"	1 5/16"	7/8"
1"	1"	1 3/16"	7/8"
1 1/2"	1 1/2"	1 21/32"	7/8"
2"	2"	2 3/16"	1 13/16"
3"	3"	3 3/16"	1 13/16"



To install or replace a sanding sleeve:

1. Hold the spindle hex nut with one of the included $\frac{9}{16}$ " wrenches.
2. Hold the flats of the spindle using the small slot in the second $\frac{9}{16}$ " wrench, as shown in **Figure 8**, and loosen the hex nut so that it can be removed by hand.



Figure 8. Loosening the spindle hex nut.

3. Remove the hex nut, upper spindle washer, sanding sleeve, sanding drum, and throat plate.
4. Clean the throat plate and lower spindle washer areas as necessary.
5. Replace the lower spindle washer.
6. Install the throat plate that will provide the smallest possible clearance between the sanding sleeve and the throat plate opening.
7. Install the desired rubber sanding drum on the spindle shaft, and install the matching sanding sleeve on the drum as shown in **Figure 9**.
8. Hand-fasten the sanding drum with the appropriate spindle washer and the hex nut.
9. Tighten the hex nut further as outlined in **Step 1** until the rubber sanding drum places slight pressure on the sanding sleeve. DO NOT overtighten the hex nut.

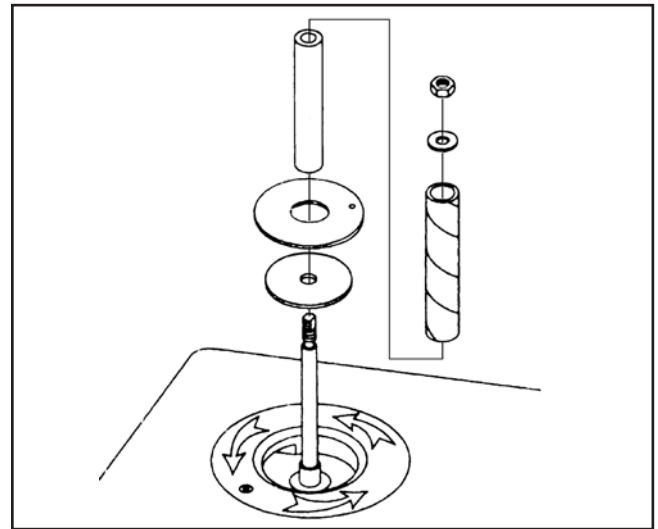


Figure 9. Sleeve installation order.

Sanding

To sand a workpiece:

1. Ensure that the spindle hex nut is secured tightly and that the work area is free of obstructions and obstacles.
2. Turn on the spindle sander and allow it to reach full speed.
3. Using both hands, guide the workpiece against the sanding sleeve in a right-to-left direction, as shown in **Figure 10**. DO NOT force the workpiece against the sanding sleeve.

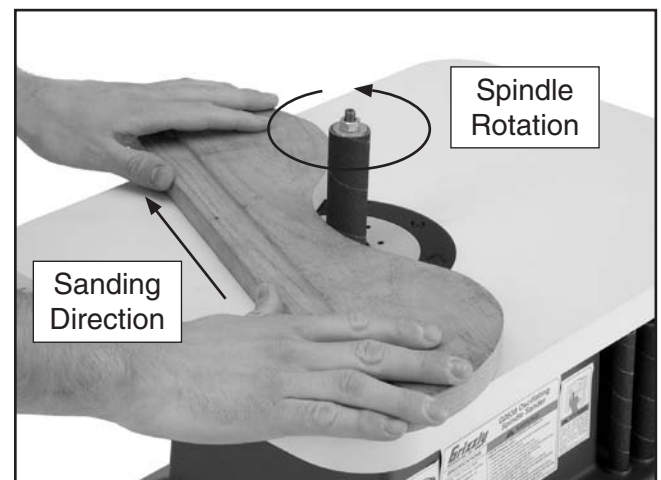


Figure 10. Sanding.



SECTION 5: ACCESSORIES

G7984—Face Shield

H1298—Dust Sealed Safety Glasses

H1300—UV Blocking, Clear Safety Glasses

H2347—Uvex® Spitfire Safety Glasses

H0736—Shop Fox® Safety Glasses

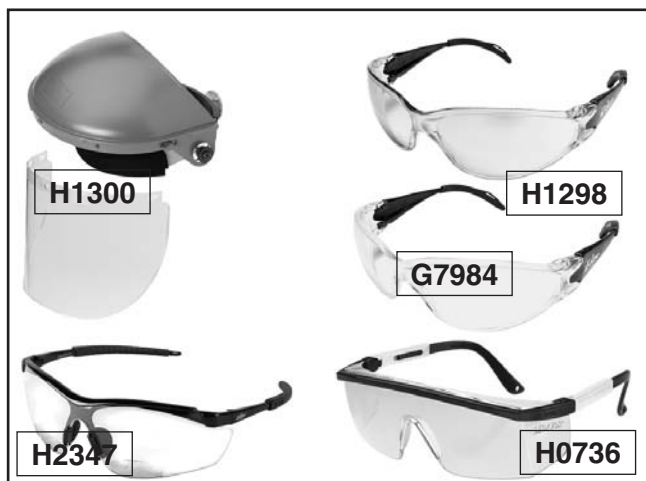


Figure 11. Our most popular safety glasses.

PRO-STIK® Belt Cleaners

G1511—Large (1½" x 1½" x 8½")

G1512—Small (2" x 2" x 12")

H1446—1⅜" x 4¼"

H1447—1⅜" x 8½"

These crepe-rubber Belt Cleaners quickly remove gum and grit from belts and discs without damage. Extend the life of your belts or discs with this innovative natural cleaner.



Figure 12. PRO-STIK® Belt Cleaners.

H5430-H5459 Sanding Sleeves

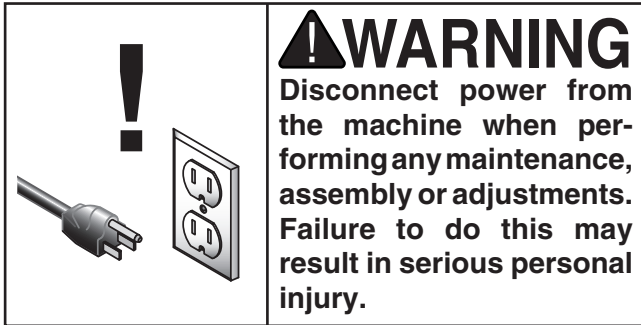
Grizzly stocks a wide variety of aluminum oxide sanding sleeves of varying sizes and grits. All our 4½" long sanding sleeves are available in 60 to 150 grit and from ½" to 3" in diameter, and come in packs of three.

MODEL	SIZE	GRIT
H5430	½" x 4½"	60
H5431	½" x 4½"	80
H5432	½" x 4½"	100
H5433	½" x 4½"	120
H5434	½" x 4½"	150
H5435	¾" x 4½"	60
H5436	¾" x 4½"	80
H5437	¾" x 4½"	100
H5438	¾" x 4½"	120
H5439	¾" x 4½"	150
H5440	¾" x 4½"	60
H5441	1" x 4½"	80
H5442	1" x 4½"	100
H5443	1" x 4½"	120
H5444	1" x 4½"	150
H5445	1½" x 4½"	60
H5446	1½" x 4½"	80
H5447	1½" x 4½"	100
H5448	1½" x 4½"	120
H5449	1½" x 4½"	150
H5450	2" x 4½"	60
H5451	2" x 4½"	80
H5452	2" x 4½"	100
H5453	2" x 4½"	120
H5454	2" x 4½"	150
H5455	3" x 4½"	60
H5456	3" x 4½"	80
H5457	3" x 4½"	100
H5458	3" x 4½"	120
H5459	3" x 4½"	150

Call 1-800-523-4777 To Order



SECTION 6: MAINTENANCE



Schedule

For optimum performance from your machine, follow this maintenance schedule and refer to any specific instructions given in this section.

Before Each Use

- Ensure mounting bolts are secure.
- Inspect sanding drums or sleeves for wear damage.
- check for worn or damaged wires.
- Check for any other unsafe condition that could hamper operation of this machine or cause potential injury.

After Each Use

- Turn **OFF** sander.
- Clean up any sawdust or particle residue from the machine.

Weekly Maintenance

- Thoroughly clean the spindle area and beneath the rotation mark plate as outlined on this page.

Monthly Maintenance

- Clean/vacuum dust buildup from inside the sander body and off the motor.

Cleaning

Cleaning the Model G0538 is relatively easy. Follow the **Sleeve Installation** instructions on **Page 15**, taking special care to clean every area thoroughly. However, sawdust and other particles can also work their way under the rotation mark plate.

To clean under the rotation mark plate:

1. Follow **Steps 1-4** of the Sleeve Installation instructions on **Page 15**.
2. Remove the three Phillips head screws and lift out the plate, as shown in **Figure 13**.

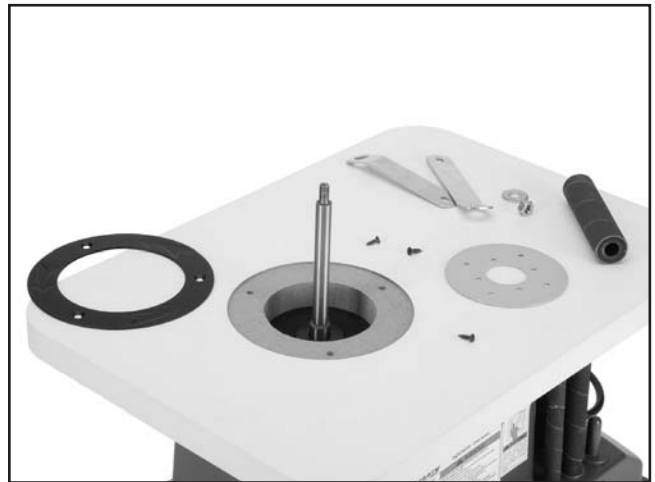


Figure 13. Rotation mark plate area.

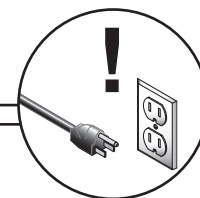
3. Wipe or vacuum out any dust or particles that have accumulated in the rotation mark plate area.
4. Reattach the rotation mark plate with the three Phillips head screws.
5. Follow **Steps 5-9** of the instructions on **Page 15** to complete the sleeve installation process.



SECTION 7: SERVICE

Review the troubleshooting and procedures in this section to fix your machine if a problem develops. If you need replacement parts or you are unsure of your repair skills, then feel free to call our Technical Support at (570) 546-9663.

Troubleshooting



Motor & Electrical

Symptom	Possible Cause	Possible Solution
Motor will not start.	<ol style="list-style-type: none">1. Low voltage.2. Open circuit in motor or loose connections.	<ol style="list-style-type: none">1. Check power line voltage and correct if necessary.2. Inspect all motor connections for loose or open connections.
Motor will not start; fuses or circuit breakers blow.	<ol style="list-style-type: none">1. Short circuit in line cord or plug.2. Short circuit in motor or loose connections.3. Incorrect fuses or circuit breakers in power line.	<ol style="list-style-type: none">1. Inspect cord and plug for damaged insulation or shorted wires.2. Inspect all motor connections for loose or shorted terminals or worn insulation.3. Install correct fuses or circuit breakers.
Motor overheats.	<ol style="list-style-type: none">1. Motor overloaded.	<ol style="list-style-type: none">1. Reduce load on motor.
Motor stalls (resulting in blown fuses or tripped circuit).	<ol style="list-style-type: none">1. Motor overloaded.2. Short circuit in motor or loose connections.3. Low voltage.4. Incorrect fuses or circuit breakers in power line.	<ol style="list-style-type: none">1. Reduce load on motor.2. Inspect connections on motor for loose or shorted terminals or worn insulation.3. Check power line voltage and correct if necessary.4. Install correct fuses or circuit breakers.
Machine slows when operating.	<ol style="list-style-type: none">1. Workpiece pressure is too great.	<ol style="list-style-type: none">1. Reduce workpiece pressure on spindle.
Machine vibrates excessively.	<ol style="list-style-type: none">1. Machine not secured to workbench.2. Incorrect motor mounting.	<ol style="list-style-type: none">1. Secure machine to workbench.2. Check/adjust motor mounting.

Sanding Operations

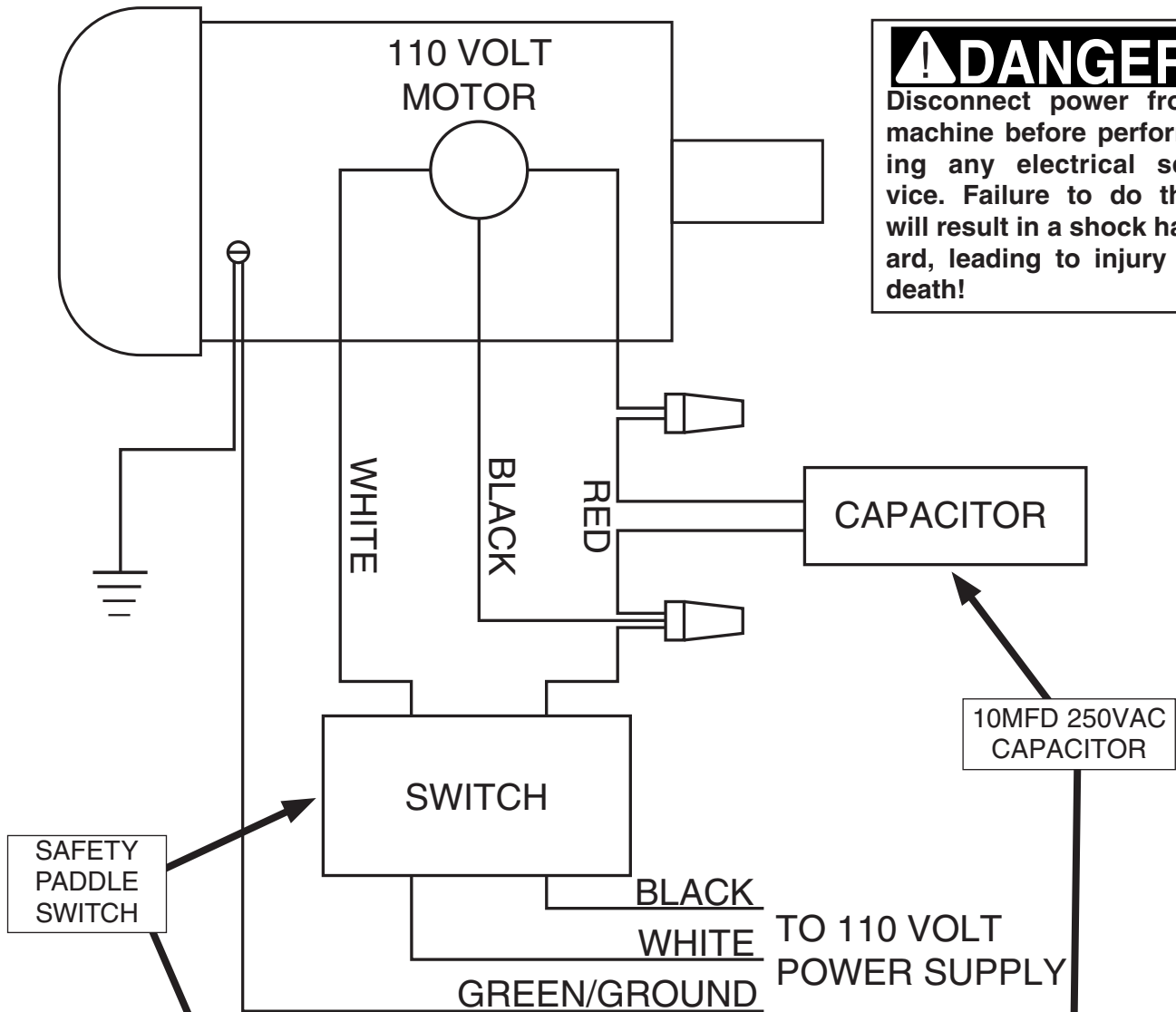
Deep sanding grooves or scars in workpiece.	<ol style="list-style-type: none">1. Sanding sleeve too coarse for the desired finish.2. Workpiece sanded across the grain.3. Too much sanding force on workpiece.	<ol style="list-style-type: none">1. Use a finer grit sanding sleeve.2. Sand with the grain.3. Reduce pressure on workpiece while sanding.
Grains rub off the sanding sleeve.	<ol style="list-style-type: none">1. Sanding sleeve has been stored in an incorrect environment.2. Sanding sleeve has been folded or smashed.	<ol style="list-style-type: none">1. Store sanding sleeve away from extremely dry or hot temperatures.2. Store sanding sleeves separately and not folded or flat.
Sanding surfaces clog quickly or burn.	<ol style="list-style-type: none">1. Too much pressure against sleeve.2. Sanding softwood.	<ol style="list-style-type: none">1. Reduce pressure on workpiece while sanding.2. Use different stock. Or, accept the characteristics of the stock and plan on cleaning/replacing belts frequently.



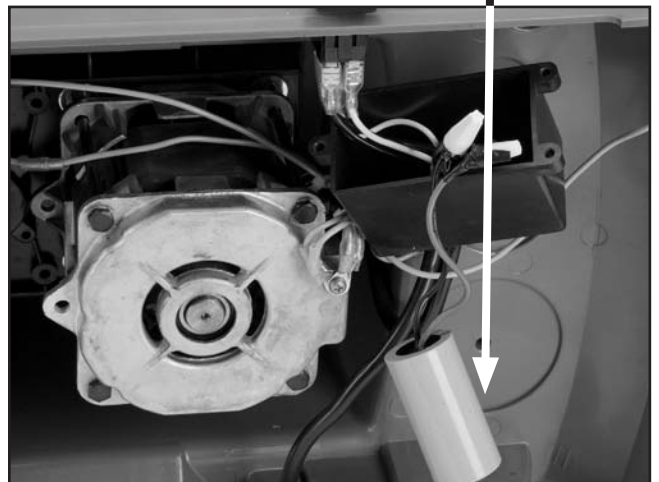
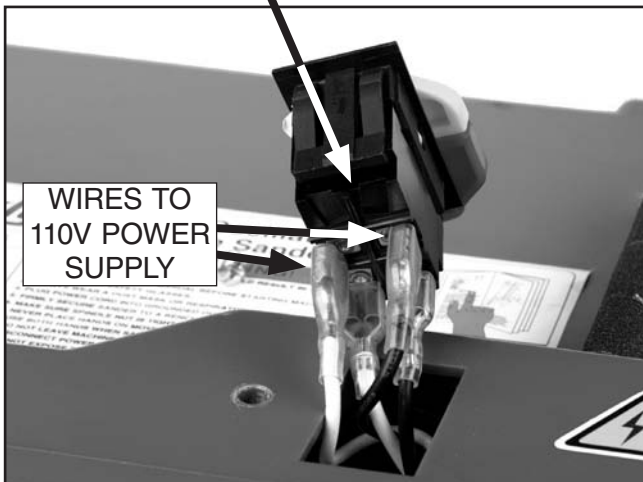
Burn marks on workpiece.	<ol style="list-style-type: none"> 1. Using too fine of sanding grit. 2. Using too much pressure. 3. Work held still for too long. 	<ol style="list-style-type: none"> 1. Use a coarser grit sanding sleeve. 2. Reduce pressure on workpiece while sanding. 3. Do not keep workpiece in one place for too long.
Glazed sanding surfaces.	<ol style="list-style-type: none"> 1. Sanding wet stock. 2. Sanding stock with high residue. 	<ol style="list-style-type: none"> 1. Dry stock properly before sanding. 2. Use different stock. Or, accept the characteristics of the stock and plan on cleaning/replacing belts/discs frequently.
Workpiece frequently gets pulled out of your hand.	<ol style="list-style-type: none"> 1. Sanding in direction of spindle rotation (left-to-right). 2. Starting the workpiece on a leading corner. 	<ol style="list-style-type: none"> 1. Move workpiece against direction of spindle rotation (right-to-left). 2. Start workpiece on a trailing corner.



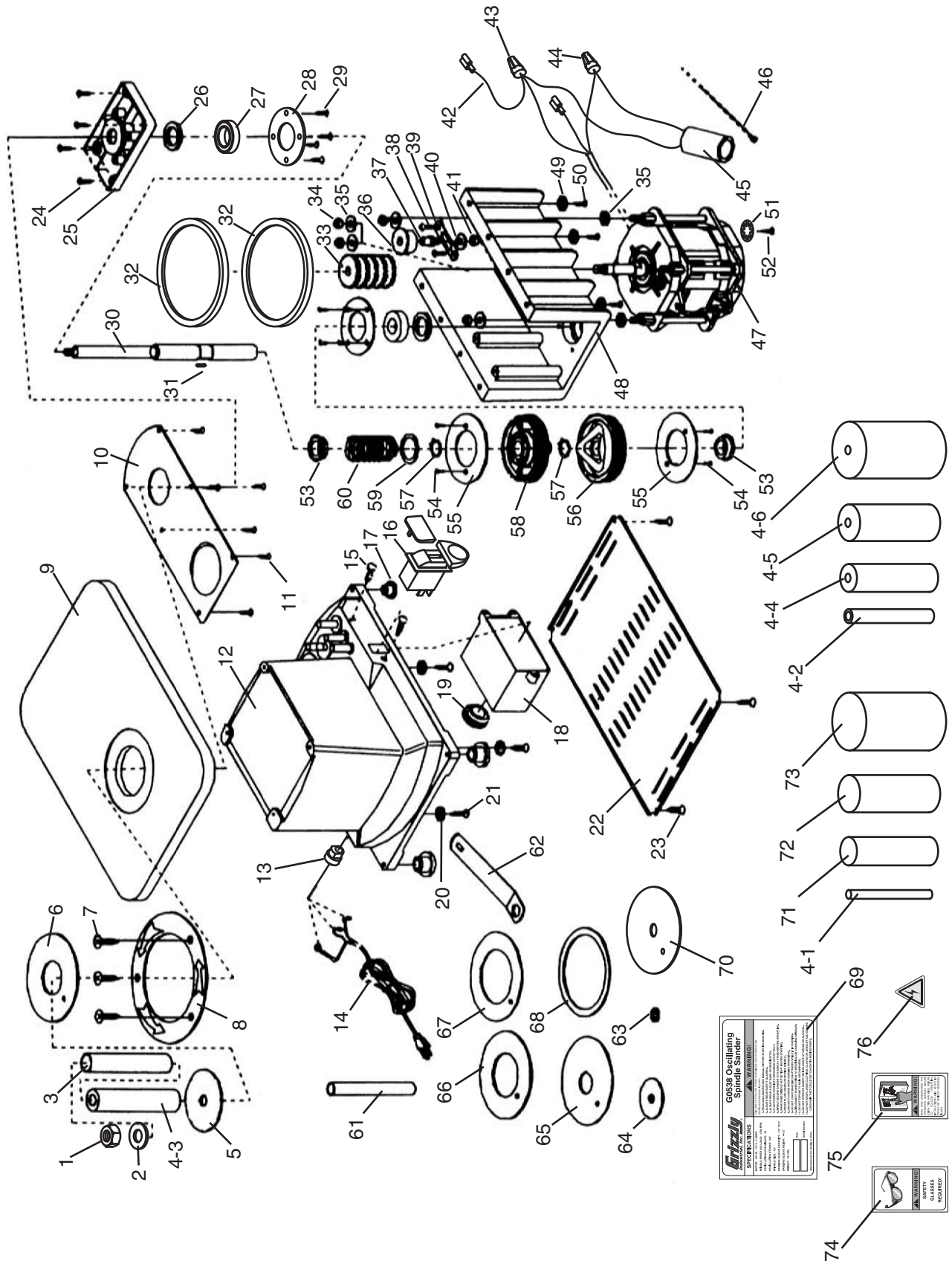
Wiring Diagram



⚠ DANGER
Disconnect power from machine before performing any electrical service. Failure to do this will result in a shock hazard, leading to injury or death!



Parts Breakdown



Parts List

REF	PART #	DESCRIPTION
1	PN03M	HEX NUT M8-1.25
2	P0538002	SPINDLE WASHER 8 X 24 X 2
3	P0538003	SANDING SLEEVE 1" X 4-1/2"
4-1	P0538004-1	SANDING SLEEVE 1/2" X 4-1/2"
4-2	P0538004-2	SANDING DRUM 3/4" X 4-1/2"
4-3	P0538004-3	SANDING DRUM 1" X 4-1/2"
4-4	P0538004-4	SANDING DRUM 1-1/2" X 4-1/2"
4-5	P0538004-5	SANDING DRUM 2" X 4-1/2"
4-6	P0538004-6	SANDING DRUM 3" X 4-1/2"
5	P0538005	SPINDLE WASHER 13 X 72 X 2
6	P0538006	THROAT PLATE 15/16" X 4"
7	PHTEK22M	TAP SCREW M3.5 X 13
8	P0538008	ROTATION MARK PLATE
9	P0538009	DISC TABLE
10	P0538010	DUST HOUSING 2 1/2"
11	PHTEK5M	TAP SCREW M4 X 12
12	P0538012	BASE
13	P0538013	STRAIN RELIEF
14	P0538014	POWER CORD W/ 5-15 PLUG
15	PHTEK6M	TAP SCREW M4 X 16
16	P0538016	SAFETY PADDLE SWITCH
17	P0538017	FOOT PAD
18	P0538018	SWITCH HOUSING
19	P0538019	CABLE BUSHING
20	PW03M	FLAT WASHER 6MM
21	PHTEK17M	TAP SCREW M5 X 20
22	P0538022	BASE PLATE
23	PHTEK5M	TAP SCREW M4 X 12
24	PHTEK6M	TAP SCREW M4 X 16
25	P0538025	BEARING HOUSING
26	P0538026	OILLESS FELT
27	P0538027	BEARING P6203-2RZ
28	P0538028	BEARING COVER PLATE
29	PHTEK6M	TAP SCREW M4 X 16
30	P0538030	TRAILING AXLE
31	PK19M	KEY 5 X 5 X 14
32	P0538032	SYNCHRONOUS BELT
33	P0538033	DRIVING PULLEY
34	PN01M	HEX NUT M6-1
35	PW01M	FLAT WASHER 8MM
36	P0538036	BRACING WHEEL SUB-ASSEMBLY

REF	PART #	DESCRIPTION
37	P0538037	BRACING WHEEL AXLE
38	PHTEK20M	TAP SCREW M5 X 14
39	P0538039	BRACING WHEEL BASE
40	PW03M	FLAT WASHER 6MM
41	PN01M	HEX NUT M6-1
42	P0538042	CONNECTING WIRE
43	PWRN01	WIRE NUT
44	PWRN01	WIRE NUT
45	P0538045	CAPACITOR 10MFD 250VAC
46	P0538046	TAPE
47	P0538047	MOTOR
48	P0538048	STAND
49	PW03M	FLAT WASHER 6MM
50	P0538050	TAP SCREW M5.5 X 22
51	P0538051	INT TOOTH WASHER 7/32"
52	PS09M	PHLP HD SCR M5-.8 X 10
53	P0538053	BUSHING
54	PHTEK19M	TAP SCREW M5 X 16
55	P0538055	DAMPER
56	P0538056	DIFFERENTIAL GEAR
57	P0538057	CHECK RING
58	P0538058	DRIVE GEAR
59	P0538059	BUSHING
60	P0538060	COMPRESSION SPRING 2 X 28 X 55
61	P0538061	SANDING SLEEVE 3/4" X 4-1/2"
62	P0538062	SLOTTED WRENCH 13MM
63	P0538063	SPINDLE WASHER 8 X 16 X 2
64	P0538064	SPINDLE WASHER 10 X 46 X 2
65	P0538065	THROAT PLATE 15/16" X 4"
66	P0538066	THROAT PLATE 1-21/32" X 4"
67	P0538067	THROAT PLATE 2-3/16" X 4"
68	P0538068	THROAT PLATE 3-3/16" X 4"
69	P0538069	MACHINE ID LABEL
70	P0538070	THROAT PLATE 11/16" X 4"
71	P0538071	SANDING SLEEVE 1-1/2" X 4-1/2"
72	P0538072	SANDING SLEEVE 2" X 4-1/2"
73	P0538073	SANDING SLEEVE 3" X 4-1/2"
74	PLABEL-11	SAFETY GLASSES 2" X 3-5/16"
75	PLABEL-12	READ MANUAL 2" X 3-5/16"
76	PLABEL-14	ELECTRICITY LABEL

WARNING

Safety labels warn about machine hazards and ways to prevent injury. The owner of this machine **MUST** maintain the original location and readability of the labels on the machine. If any label is removed or becomes unreadable, **REPLACE** that label before using the machine again. Contact Grizzly at (800) 523-4777 or www.grizzly.com to order new labels.



WARRANTY AND RETURNS

Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

To take advantage of this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number," which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.





WARRANTY CARD

Name _____

Street _____

City _____ State _____ Zip _____

Phone # _____ Email _____ Invoice # _____

Model # _____ Order # _____ Serial # _____

The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. **Of course, all information is strictly confidential.**

1. How did you learn about us?

_____ Advertisement

_____ Friend

_____ Catalog

_____ Card Deck

_____ Website

_____ Other:

2. Which of the following magazines do you subscribe to?

_____ Cabinetmaker & FDM

_____ Popular Science

_____ Wooden Boat

_____ Family Handyman

_____ Popular Woodworking

_____ Woodshop News

_____ Hand Loader

_____ Precision Shooter

_____ Woodsmith

_____ Handy

_____ Projects in Metal

_____ Woodwork

_____ Home Shop Machinist

_____ RC Modeler

_____ Woodworker West

_____ Journal of Light Cont.

_____ Rifle

_____ Woodworker's Journal

_____ Live Steam

_____ Shop Notes

_____ Other:

_____ Model Airplane News

_____ Shotgun News

_____ Old House Journal

_____ Today's Homeowner

_____ Popular Mechanics

_____ Wood

3. What is your annual household income?

_____ \$20,000-\$29,000

_____ \$30,000-\$39,000

_____ \$40,000-\$49,000

_____ \$50,000-\$59,000

_____ \$60,000-\$69,000

_____ \$70,000+

4. What is your age group?

_____ 20-29

_____ 30-39

_____ 40-49

_____ 50-59

_____ 60-69

_____ 70+

5. How long have you been a woodworker/metalworker?

_____ 0-2 Years

_____ 2-8 Years

_____ 8-20 Years

_____ 20+ Years

6. How many of your machines or tools are Grizzly?

_____ 0-2

_____ 3-5

_____ 6-9

_____ 10+

7. Do you think your machine represents a good value?

_____ Yes

_____ No

8. Would you recommend Grizzly Industrial to a friend?

_____ Yes

_____ No

9. Would you allow us to use your name as a reference for Grizzly customers in your area?

Note: We never use names more than 3 times.

_____ Yes

_____ No

10. Comments: _____

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